



ORIGINAL

003
5E



Engineering for the Environment. Planning for People.™

1055 Andrew Drive, Suite A
West Chester, PA 19380-4293
tel 610.840.9100 fax 610.840.9199
www.advancedgeoservices.com

January 30, 2009

2001-847-16

Mr. Joseph McDowell
USEPA – Region III – 3HS21
Hazardous Sites Cleanup Division
1650 Arch Street
Philadelphia, PA 19103-2029

RE: Crater Resources Superfund Site
100% Remedial Design Comments
Quarry 3, Phase One

Dear Mr. McDowell:

On behalf of our client, the Crater Resources Cooperating Respondent Group, we are pleased to respond to your comments and conditional approval provided in your January 29, 2009 letter regarding the 100% Remedial Design for Quarry 3, Phase One. Original comments are in bold.

1. Cover pages of Appendices F, G, and H are for the 90% RD.

Response: These cover pages have been updated to indicate they are part of the 100% RD. A set of appropriate cover pages is enclosed for you to replace in your copies of 100% RD.

2. Update Appendix C (schedule) as necessary.

Response: The schedule will be updated periodically and provided to USEPA and other interested parties.

3. Appendix G (SAP); Section 3.4.5: Section refers to Appendix M for the statistical evaluation or confirmation sampling. The evaluation has been submitted as a separate document; there is no Appendix M in the RD.

Response: The statistical analysis memo is referenced in the SAP (which applies to all phases of work); however, post excavation sampling is not anticipated to be necessary during Phase 1 work, therefore the Memo discussing the post excavation verification process was not included in the Phase 1 RD submission. Appendix M (the post excavation verification memo) is included in the Phase 2 submission, which EPA now has.

Mr. Joseph McDowell
USEPA – Region III – 3HS21
2001-847-16
January 30, 2009
Page 2 of 2



4. The Group should provide updates of all correspondence with the MCCD regarding permit status.

The Group has applied for an Individual NPDES permit equivalent and is awaiting a response from the MCCD. The Group will provide updates on the status of the permit equivalent application status when a response is received from MCCD.

5. The performance standard for visible dust at the perimeter has not been adequately addressed. This standard has not been added to Appendix G, Table 3-2 as well as Specification 02117, Section 3.2, as per the 7/31/08 Response to Comment #35. The specification only states that work may be stopped by the QA official for excessive dust. Note that a no visible dust at the perimeter standard exists and should be monitored and enforced by the QA Official.

Response: The RD has been modified to include the "no visible dust" standard. As we discussed the compliance point is essentially the "Public Access line" which would be the Curb line of Renaissance Blvd. to the north, the 2701 Renaissance Blvd. Property line to the west, the 2301 Renaissance Blvd. property line to the east and the edge of the fairway on the golf course to the south. An updated copy of Specification 02117 and Table 3-2 (Appendix G) is enclosed as a replacement.

If you have any questions, please contact me at (610) 840-9162.

Sincerely,

ADVANCED GEOSERVICES CORP.

Thomas M. Legel, P.E.
Supervising Contractor

TML:car

Enclosure

cc: Distribution List



CRATER RESOURCES SUPERFUND SITE

DISTRIBUTION:

Joseph McDowell	USEPA	(3 copies)
Tim Sheehan	PADEP	(2 copies)
Joseph Bartlett	Upper Merion Township	
Mike Bollinger	Beazer East	
Michael Christie	Penn Environmental	
Bruce Fishman	RBR Consulting	
Andrew B. Frebowitz	TetraTech NUS, Inc.	
Gene Gonsoulin	Environmental Management Eng., Inc.	
Brenda Gotanda	Manko,Gold & Katcher	(letter only)
Curtis Jones, Esq.	Drummond Co	(letter only)
Paul S. Kline, Esq.	Beazer East	(letter only)
Kevin Kyle	O'Neill Properties	
Jeffrey A. Leed	Leed Environmental, Inc.	
Ann Logue	Schoor Depalma	
Joseph McGovern, Esq.	Obermayer, Rebmann	
Robert McKinstry, Esq.	Ballard Spahr	
Mitch Moss	ECOR Solutions	
Mike Osburn	Keystone/Drummond	
Douglas Schleicher, Esq.	Klehr, Harrison-	(2 copies)
Rick Shoyer	Synergy	
John Stoviak, Esq.	Saul Ewing	(letter only)
Jim Zubrow	Key Environmental	(letter only)

**TABLE 3-2
AIR MONITORING STANDARDS, GUIDELINES, AND ACTIONS
CRATER RESOURCES SUPERFUND SITE - QUARRY THREE SAP**

Parameters	Site Worker (Personnel Monitoring)		General Public (Perimeter and Near Field)	
	OSHA/ACGIH	Actions if Levels Exceeded	Perimeter Guidelines	Actions if Levels Exceeded
Arsenic (inorganic)	10 ug/m3 PEL-TWA 5 ug/m3 Action Level	Respiratory Protection Modified Dust Control Re-sample	1 ug/m3 PEL	Modify dust control even if no visible dust migration
Mercury	25 ug/m3 PEL-TWA 100 ug/m3 Ceiling Level (OSHA)	Respiratory Protection Modified Dust Control Re-sample	2.5 ug/m3 TLV 10 ug/m3 Ceiling Level	Modify dust control even if no visible dust migration
Total VOC	Based on Top 10 Identified	Respiratory Protection Modified Dust Control Re-sample	1/10th of OSHA/ACGIH	Modify dust control even if no visible dust migration
Naphthalene	10 ppmV PEL-TWA 15 ppmV STEL (ACGIH)	Respiratory Protection Modified Dust Control Re-sample	1 PPM PEL	Modify dust control even if no visible dust migration
Coal Tar Pitch Volatiles	0.2 mg/m3 PEL-TWA	Respiratory Protection Modified Dust Control Re-sample	0.02 mg/m3 PEL	Modify dust control even if no visible dust migration
Total Dust	15 mg/m3 PEL-TWA	Respiratory Protection Modified Dust Control Re-sample	1.5 mg/m3 PEL 'No Visible Dust'	Modify dust control and work procedures Stop work if necessary
Total VOC (Real-Time)	5 ppmV (1/2 of Naphthalene PEL)	Respiratory Protection Modified Dust Control Continue Monitoring	1 ppmV (Naphthalene PEL)	Modify dust control and work procedures Stop work if necessary



SECTION 02117
DUST AND ODOR CONTROL AND AIR MONITORING SPECIFICATIONS

PART 1: GENERAL

1.1 DESCRIPTION

The work covered by this Section shall include, but not be limited to furnishing, installing, and maintaining dust controls and air monitoring. The Contractor shall be responsible personnel air monitoring within the work zone in accordance with the Contractor's Health and Safety Plan (HASP) and for all controls necessary to prevent generation of dust and odors. The Group's QA Official will be responsible for performance of perimeter and near-field air monitoring as described in the Sampling and Analysis Plan (SAP). The quantity and type of dust and odor control measures may be increased or decreased at the directive of the Group's QA Official based upon actual conditions which occur during the construction of the project. Such variations in quantity shall not be considered as alterations in the details of construction or a change in the character of the work.

1.2 RELATED SECTIONS

- A. Section 01050 - Field Engineering
- B. Section 01300 - Submittals
- C. Section 02110 - Site Preparation and Clearing
- D. Section 02115 – Erosion and Sediment Control Measures
- E. Section 02209 - Soil and Waste Removal/Handling Placement
- F. Section 02210 - Earthwork
- G. Section 02715 - Water Management (During Construction)
- H. Section 02936 - Turf Establishment

1.3 REFERENCES

Not Used.

1.4 SUBMITTALS

Material properties for dust and odor emission control agents (if any other than water are used) shall be submitted to the Group and the Group's QA Official for approval. Information shall include the source, MSDS sheets and the proposed methods of application.

The Contractor shall submit the analytical laboratory's qualifications for approval by the Group, USEPA and PADEP prior to use. The Contractor shall submit the real-time air monitoring trigger level calculations for PPE to the Group's QA Official prior to use.

1.5 QUALITY ASSURANCE

Quality assurance of dust and odor control measures and air monitoring shall be performed in accordance with Contract Documents, including the Construction Quality Assurance Plan (CQAP) and the Sampling and Analysis Plan (SAP). Work will be monitored by the Group's QA Official. The Contractor is responsible for ensuring that all materials meet this specification. Any material not in conformance with these Specifications will be rejected and removed from the Site at the Contractor's expense.

PART 2: PRODUCTS

2.1 DUST AND ODOR CONTROL AGENTS

Dust control agents shall include potable water, stockpile covers, mulch, or spray adhesives. Decontamination water may be used for dust control only in contaminated areas. Mulch shall meet the requirements of Section 02936. Odor control agents shall include potable water and foam suppressants.

2.1.1 Dust Control Agents

The use of spray adhesives must specifically be approved by the Group through the submittal process prior to on-site use.

- A. Short-term gelatin/cellulose based coatings shall be used, when necessary, for dust control during active excavation and overnight. Short-term coatings shall be able to remain effective from a few hours to a few days.
- B. Product shall consist of fibrous cellulose or gelatinous membrane materials combined with a binder and water.
- C. Coatings shall be bio-degradable and non-toxic.

2.1.2 Odor Control Agents

- A. Short-term foam suppressants shall be used as necessary for odor control during active excavation and overnight.
- B. Short-term foam suppressants are thick viscous foams that trap emissions and dust within its bubbles.
- C. Short-term foam suppressants shall be biodegradable, non-toxic, non-flammable and odorless.
- D. Odor masking agents may also be used with approval of the Group's QA Official.

2.2 AIR MONITORING

Materials, equipment and laboratory used for air monitoring shall be in accordance with the SAP. In general, the Contractor will supply air monitoring materials, equipment, and laboratory for work zone and personnel monitoring.

PART 3: EXECUTION

3.1 FAMILIARIZATION

Prior to implementing any dust and/or odor control measures, the Contractor shall become thoroughly familiar with the Site, the Site conditions, and all portions of the work pertaining to and/or related to this section. The Contractor shall carefully inspect the completed work of other Sections and verify that all work is complete to the point where the work covered by this Section may commence. Any conflicts or concerns with work which may impact the work shall be brought to the attention of the Group's QA Official in writing.

3.2 DUST CONTROL

Dust control shall be conducted throughout the Quarry 3 work areas, the access road and on Renaissance Blvd. during all phases of work to minimize the presence of visible dust. The Group's QA Official has the authority to stop work at any time if visible dust is present at the perimeter of the Quarry 3 Site. Work may not proceed until dust control measures are implemented to the satisfaction of the Group's QA Official at no additional cost to the Group for either the additional dust control or the stoppage of work. Dust control measures shall be applied periodically throughout each work day throughout the Site as necessary. Dust control measures shall be applied to disturbed contaminated areas, including excavations and soil stockpiles, at the end of each work day as necessary. Dust control may be conducted by sprinkling with potable water in non-contaminated areas, or with decontamination water in contaminated areas, until the surface is wet; or mulching at 2 to 2.5 tons per acre with anchoring. Spray-on adhesive may also be used in areas of no vehicular traffic. Dust control shall be conducted by the Contractor to the satisfaction of the Group's QA

Official. Except for water, all materials used for dust control shall be approved by the Group through the submittal process.

3.3 ODOR CONTROL

Odor control shall be conducted throughout the Quarry 3 work areas during all phases of work to prevent the release of nuisance odors to the surrounding properties. The Group's QA Official has the authority to stop work at any time if significant odors become present. Work may not proceed until odor control measures are implemented to the satisfaction of the Group's QA Official at no additional cost to the Group for the stoppage of work. Odor control measures shall be applied as necessary throughout each work day. Odor control measures shall be applied to excavations at the end of each work day, as directed by the Group's QA Official. Odor control may be conducted by sprinkling with decontamination water in excavation areas, until the surface is wet; or by using foam suppressants. Except for water, all materials used for odor control shall be approved by the Group through the submittal process.

3.4 AIR MONITORING

3.4.1 General

Perimeter air monitoring and near field monitoring outside the work zone will be conducted by the Group's QA Official. Real-time and personnel air monitoring in the work zone shall be conducted by the Contractor in accordance with the HASP including, but not limited to, maintenance, calibrations, weather data collection, documentation, sampling, shipping, analysis and submission of quality control reports. Personnel monitoring shall be addressed in the Contractor's HASP.

The Contractor personnel who perform the air monitoring functions shall be experienced in the field of air monitoring at various sites. Any discrepancies in air monitoring procedures shall be resolved as directed by the Group's QA Official.

Air monitoring results from the Contractor and QA Official will be included in the Daily QC reports generated by the Contractor.

3.4.2 Performance Standards

The performance standard for real time perimeter air monitoring for particulates is 1,500 ug/m³. In addition a 'no visible dust' standard shall be enforced at the perimeter of the Quarry 3 Site. The site performance standard for Total VOC's will be 1 ppmV. When perimeter air monitoring results averaged over a 15-minute period exceed the performance standard, the Group's QA Official shall immediately notify the Contractor. The Contractor shall immediately stop work and implement additional dust and/or odor control measures as described in this Specification. Work may not commence until real-time readings are less than the trigger level and/or the Group's QA Official has approved resuming work.

Performance standards based on real time measurements are subject to change during the project once a correlation is developed with laboratory analytical data.

3.4.3 Completion

The Contractor shall not terminate monitoring of air until approved by the QA Official.

Contractor shall submit a final Air Monitoring Report at the conclusion of the project which shall include the results of all air sampling and analyses, meteorological measurements, real-time monitoring, equipment calibration and maintenance records and copies of the field logbook.

PART 4: MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

The use of water for dust and odor controls is considered incidental to the work and will not be measured. The use of foams or posi-shells, as directed by the QA Official, shall be paid for on a

time and materials basis. The Contractor shall provide equipment, material, and labor rates for application of foams or posi-shells for dust and odor controls in his bid. The amount of time and materials used during application of dust and odor controls shall be subject to approval of the Group's QA Official. Work zone personnel monitoring shall be measured as a lump sum item.

4.2 PAYMENT

Water for dust and odor controls is considered incidental to the work and will not be paid for separately. Application of foams or posi-shells, as directed by the QA Official for dust and odor controls shall be paid based on the time and materials used as determined by the Group's QA Official. Payment shall include, but not be limited to, all labor, materials, equipment, expertise, re-application, monitoring and change of methods and/or materials required to maintain compliance with the Specification for dust and odor controls.

Air monitoring, including real-time and personnel monitoring within the work zone, shall be paid based on the lump sum price, with payment given in accordance with the percentage of completion of work as determined by the Group's QA Official. Payment shall include, but not be limited to, all labor, materials, equipment, maintenance, calibration, data collection, recording, documentation, expertise, and quality control/quality assurance required to conduct air monitoring in accordance with the Contract Documents.

The completed work shall be paid in accordance with the following unit price schedule:

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Odor/Dust Control	Time and Materials
Labor	Hr.
Equipment	Hr.
Foams/Shells	Gallon
Air Monitoring	Lump Sum



**APPENDIX F
VEHICLE AND PEDESTRIAN TRAFFIC CONTROL PLAN
100% REMEDIAL DESIGN**

QUARRY 3

**CRATER RESOURCES SUPERFUND SITE
Upper Merion Township, Montgomery County, Pennsylvania**

Prepared For:

**CRATER RESOURCES COOPERATING RESPONDENT
GROUP**

Prepared By:

**ADVANCED GEOSERVICES, CORP.
West Chester, Pennsylvania**

**Project Number 2001-847-15
January 20, 2009**



**APPENDIX G
SAMPLING AND ANALYSIS PLAN
100% REMEDIAL DESIGN**

QUARRY 3

**CRATER RESOURCES SUPERFUND SITE
UPPER MERION TOWNSHIP, MONTGOMERY COUNTY,
PENNSYLVANIA**

Prepared For:

**CRATER RESOURCES COORDINATING RESPONDENT
GROUP**

Prepared By:

**ADVANCED GEOSERVICES CORP.
West Chester, Pennsylvania**

**Project Number 2001-847-15
January 20, 2009**



**APPENDIX H
CONSTRUCTION QUALITY ASSURANCE PLAN
100% REMEDIAL DESIGN**

QUARRY 3

**CRATER RESOURCES SUPERFUND SITE
Upper Merion Township, Montgomery County, Pennsylvania**

Prepared For:

**CRATER RESOURCES COOPERATING RESPONDENT
GROUP**

Prepared By:

**ADVANCED GEOSERVICES, CORP.
West Chester, Pennsylvania**

**Project Number 2001-847-15
January 16, 2009**